ABSTRACT

When an ad hoc network is formed between short range wireless devices, at least one device assumes the role of an ad hoc network information provider for the new piconet. In this role, the device allocates a browsing hierarchy of service classes in its service registry. The service classes will provide a record to characterize the ad hoc network. When a new wireless device arrives within the communication range of any member of the ad hoc network, its inquiry signals are answered by the first member detecting the inquiry. If that first member is an ad hoc network information provider, it responds with information accessed from its service registry characterizing the ad hoc network. If, instead, an ordinary device in the ad hoc network is the first to respond to the inquiry signals of the arriving device, the device responds with the address of the ad hoc network information provider. The arriving device then pages the ad hoc network information provider to obtain information characterizing the ad hoc network.